

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IB 03/04262

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 H04B1/44 H01P1/15

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 H04B H01P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 237 222 A (ERICSSON TELEFON AB L M) 4 September 2002 (2002-09-04) page 2, line 7 - line 9 figure 3A	1,9-11
X	US 6 021 318 A (SCHAFER JOSEF-PAUL) 1 February 2000 (2000-02-01) column 1, line 7 - line 17 figures 1,2	1,2,9-11
A	EP 1 152 543 A (MATSUSHITA ELECTRIC IND CO LTD) 7 November 2001 (2001-11-07) cited in the application figures 7,8	1-11

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

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Date of the actual completion of the international search

15 January 2004

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22/01/2004

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1237222	A	04-09-2002	EP 1237222 A1	04-09-2002
			WO 02069435 A1	06-09-2002
US 6021318	A	01-02-2000	DE 19704151 C1	27-08-1998
			CN 1195239 A ,B	07-10-1998
			EP 0862279 A2	02-09-1998
			JP 10313266 A	24-11-1998
EP 1152543	A	07-11-2001	EP 1152543 A1	07-11-2001
			WO 0145285 A1	21-06-2001
			US 2002137471 A1	26-09-2002